



INTERNATIONAL ROAD DYNAMICS INC.

User's Manual Autopoll

Dwg#: 82200501





INTERNATIONAL ROAD DYNAMICS INC.

QUALITY IN MOTION

User's Manual

Autopoll

Part No. 82200501

Revision G

Date: 6/21/2013

For further information or assistance, call IRD's Customer Service Hotline
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TABLE OF CONTENTS

1.0 INTRODUCTION	1-1
1.1 FEATURES	1-1
1.2 SYSTEM REQUIREMENTS	1-1
2.0 INSTALLATION.....	2-1
2.1 UPGRADING FROM REVISION D OR E TO F.....	2-1
2.2 UPGRADING FROM REVISIONS A, B OR C TO F	2-1
2.2.1 Upgrading from Autopoll Revision C.....	2-2
2.3 UPGRADING FROM REVISIONS A OR B.....	2-2
2.4 MICROSOFT .NET FRAMEWORK	2-2
2.5 INSTALL AUTOPOLL	2-3
2.6 POST INSTALLATION	2-4
3.0 AUTOPOLL MAIN WINDOW	3-1
3.1 TOOLBAR MENUS.....	3-1
3.1.1 File	3-2
3.1.2 Logs	3-2
3.1.3 Tools	3-3
3.1.4 Help.....	3-3
3.2 SITE LIST.....	3-4
3.3 SITE INFORMATION.....	3-5
3.4 AUTOPOLL SCHEDULE	3-6
3.5 START/STOP.....	3-6
3.6 BUTTONS.....	3-7
4.0 NEW SITE / EDIT SITE	4-1
4.1 SITE INFORMATION.....	4-2
4.2 DATA TO DOWNLOAD.....	4-4
4.2.1 Image/Index Files	4-6
4.3 SCHEDULE	4-8
4.4 CONNECTION	4-9
4.4.1 Network Connection	4-9
4.4.2 RAS Connection	4-10
4.4.3 Serial Over IP.....	4-13
4.4.4 Dial-Up.....	4-14
4.4.5 Serial.....	4-16

4.5 TRANSFER PROTOCOL	4-17
4.5.1 FTP/SFTP Properties	4-17
4.6 OK/CANCEL.....	4-18
5.0 POLL	5-1
6.0 HARDWARE.....	6-1
6.1 HARDWARE	6-1
6.2 PORTS.....	6-2
7.0 SETTINGS.....	7-1
7.1 GENERAL.....	7-1
7.2 SITES	7-2
7.3 PORT SETTINGS.....	7-3
7.4 LOGS.....	7-5
7.5 E-MAIL.....	7-6
7.6 FTP PROPERTY	7-7
A.0 APPENDIX A - LOGS	A-1
A.1 SYSTEM LOG	A-1

1.0 INTRODUCTION

IRD Autopoll is a software application to perform the routine task of downloading data from remote data collection sites with minimal supervision. The application maintains a list of sites, a schedule of when to poll each site, what data to download, and where to store the data downloaded from each site.

1.1 FEATURES

Autopoll supports the following features:

- Supports vehicle record data transfer from the following traffic data collection systems: iSINC Data Collection systems, TCC-540 Traffic Counters (v.2.8 and later), DAW 190 data collection systems and IRD 1060 Series (MS-DOS and UnixWare v.7.x) systems. Data can also be transferred from any FTP server.
- Supports the following connections: direct serial port connection, IP network, dial-up modem, dial up networking, serial over IP and Remote Access Server (RAS).
- Autopoll Schedule feature allows automatic connection and data download on a programmed schedule.
- Create and maintain an unlimited number of sites.
- Easy to use and intuitive user interface.

1.2 SYSTEM REQUIREMENTS

- Windows 7, Windows 7 Service Pack 1, Windows Server 2003 Service Pack 2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2008 R2 SP1, Windows Vista Service Pack 1, Windows XP Service Pack 3, Microsoft .NET Framework 4.0.
- 10 MB of free hard disk space for Autopoll
- 850MB for Microsoft .NET Framework 4.0.
- A connection to each remote site through one or more of the following:
 - an Internet or intranet network connection
 - a Hayes compatible modem (56 Kbps minimum)
 - a direct COM port connection

2.0 INSTALLATION

Warning: Please read the instructions in this section carefully before upgrading Autopoll; FAILURE TO DO SO MAY RESULT IN LOST INFORMATION!

The information in this section is also given in the **READ ME FIRST.txt** file on the installation CD.

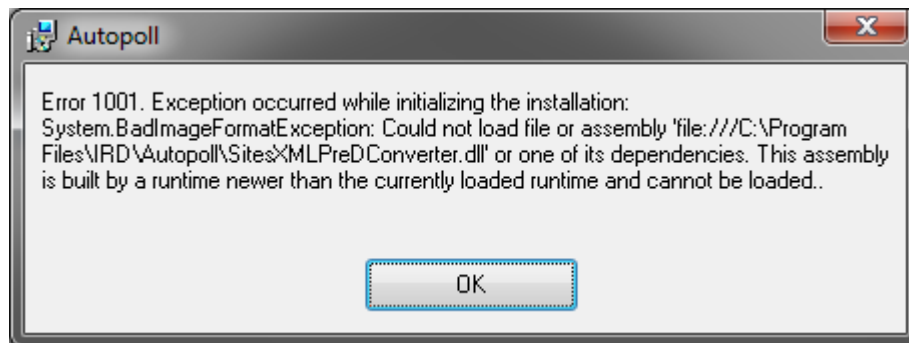
Note that for Autopoll Revision F and later, after an upgrade from an earlier version is performed, the configuration files, **SitesConfig.xml** and **GnrlSettings.xml**, will be located in the common documents folder:

in Windows Vista and Windows 7 this is **C:\Users\Public\Documents\IRD\Autopoll**, and in Windows XP it is

C:\Documents and Settings\All Users\Shared Documents\IRD\Autopoll.

2.1 UPGRADING FROM REVISION D OR E TO REV F OR LATER

Versions D or E must be manually uninstalled prior to installing version F or later software. If these versions are not uninstalled prior to installing version F or later, the user may see an error message similar to:



and the installation will fail.

2.2 UPGRADING FROM REVISIONS A, B OR C TO REV F OR LATER

This section provides instructions for updating from versions older than version D to version F and later.

The releases of IRDs Autopoll software from Revision D on use a revised XML file for storing site information and the general configuration settings. Conversion from the earlier file formats is performed automatically during installation if the files exist.

In Autopoll Revisions A, B and C, a template for site information was placed in a file named **Site.xml**, the actual sites information was placed in a file named **Sites.xml** and the general configuration information was found in a file named **Settings.xml**. These three files can be found in the **Configuration** folder of the Autopoll installation directory. Following an upgrade to Revision D or later, these files will remain in the directory, however, a new site information file, **SitesConfig.xml** and a new general configuration file, **GnrlSettings.xml**, will appear in the same directory. The old files, **Site.xml**, **Sites.xml** and **Settings.xml**, will be unused and can be deleted following the upgrade

Image file downloading configuration has changed. Please check your image file downloading configuration after upgrading.

2.2.1 UPGRADING FROM AUTOPOLL REVISION C

To upgrade from Autopoll Revision C to Revision D or later software, run **setup.exe** from the Autopoll Revision D or later distribution CD. This will automatically uninstall revision C and install the new revision. The site information from revision C will be automatically transferred from the **Sites.xml** file to the new **SiteConfig.xml** file during installation. The general configuration information will also be transferred from the **Settings.xml** to the new **GnrlSettings.xml** file during installation.

2.3 UPGRADING FROM REVISIONS A OR B

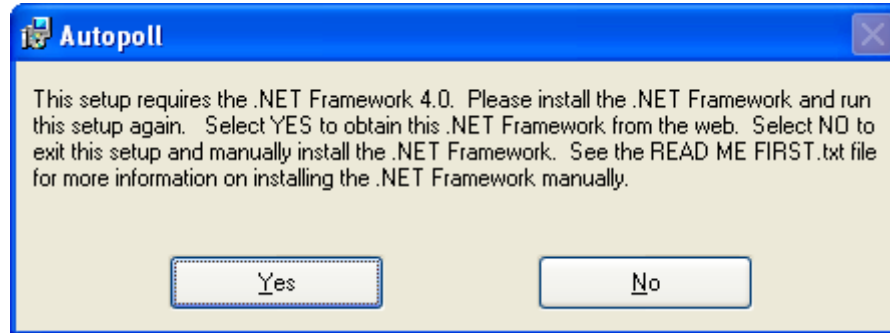
Autopoll Revision D or later installation is designed to automatically uninstall older versions of Autopoll; however, as a result of the installation process of versions A or B, the Revision D and later uninstall process will remove three key parameter files: **Settings.xml**, **Site.xml** and **Sites.xml**. **If you are upgrading to Autopoll Revision D or later from Revision A or B, it is IMPORTANT that these files be backed up safely BEFORE installing the new version of Autopoll or all the INFORMATION in them WILL BE LOST.**

To perform an Autopoll upgrade from Revision A or B to Revision D or later, follow the steps below:

1. Back up the parameter files; open Windows Explorer and navigate to the directory where Autopoll is installed (the default installation directory is **C:\ProgramFiles\IRD\Autopoll**). Open the **Configuration** subdirectory. This directory should contain the **Settings.xml**, **Site.xml** and **Sites.xml** files. Either copy these three files to a backup directory somewhere else on the drive or rename the files with different names.
2. Uninstall the old version of Autopoll using the **Windows Control Panel – Add/Remove Programs** function.
3. Restore the **Settings.xml**, **Site.xml** and **Sites.xml** files back to the **Configuration** subdirectory. Note that you may need to recreate the Configuration folder.
4. Run the Revision D or later installation. The site information from the older version will be automatically transferred from the old files to the new files during installation.

2.4 MICROSOFT .NET FRAMEWORK

The Microsoft .NET Framework Version 4.0 must be installed prior to installation of Autopoll. If the Microsoft .NET Framework 4.0 is not installed on the computer, a dialog window similar to the one below will be displayed when the Autopoll installation is started:



The dialog window will present two command buttons, **Yes** or **No**.

If **Yes** is selected, the Autopoll installation will end and a web browser will attempt to open a Microsoft Web page for downloading the necessary .NET Framework. Follow the installation steps to install the necessary .NET Framework.

When the .NET Framework installation is complete, you must re-run the Autopoll installation.

If **No** is selected or the computer has no Internet connection or the web browser cannot reach the Microsoft web page, the .NET Framework can be installed manually.

If you have received an installation CD, open the CD root directory with Windows Explorer. Double click to run the program **dotNetFx40_Full_x86.exe**. Follow the installation steps to install the necessary .NET Framework.

When the .NET Framework installation is complete, you must re-run the Autopoll installation.

Alternately, you can copy the file **dotNetFx40_Full_x86.exe**, from another computer and transfer it to the computer where Autopoll is to be installed. To perform this operation, open a web browser on a computer with web access and go to:

http://download.microsoft.com/download/5/6/4/5641DA81-E6FA-4550-9F80-A1D862D9CFAA/dotNetFx40_Full_x86.exe

Save the file to a location on the computer where you can easily find the file after downloading, such as the desktop (do not run it unless you are on the computer where you plan to install Autopoll). After downloading the file, transfer it to the computer where Autopoll is to be installed and run it to install .NET Framework.

When the .NET Framework installation is complete, you must re-run the Autopoll installation.

2.5 INSTALL AUTOPOLL

To install Autopoll, insert the CD in the CD reader on the computer where it is to be installed. Follow the instructions in the Autopoll Setup Wizard to install Autopoll.

If Windows auto-run is disabled, follow these steps to start the Autopoll setup program:

- Click the windows **Start** button, click **Run...**

- In the Run pop-up window, enter **D:\Setup.Exe** where D is the CD drive on which the Autopoll install CD is located.

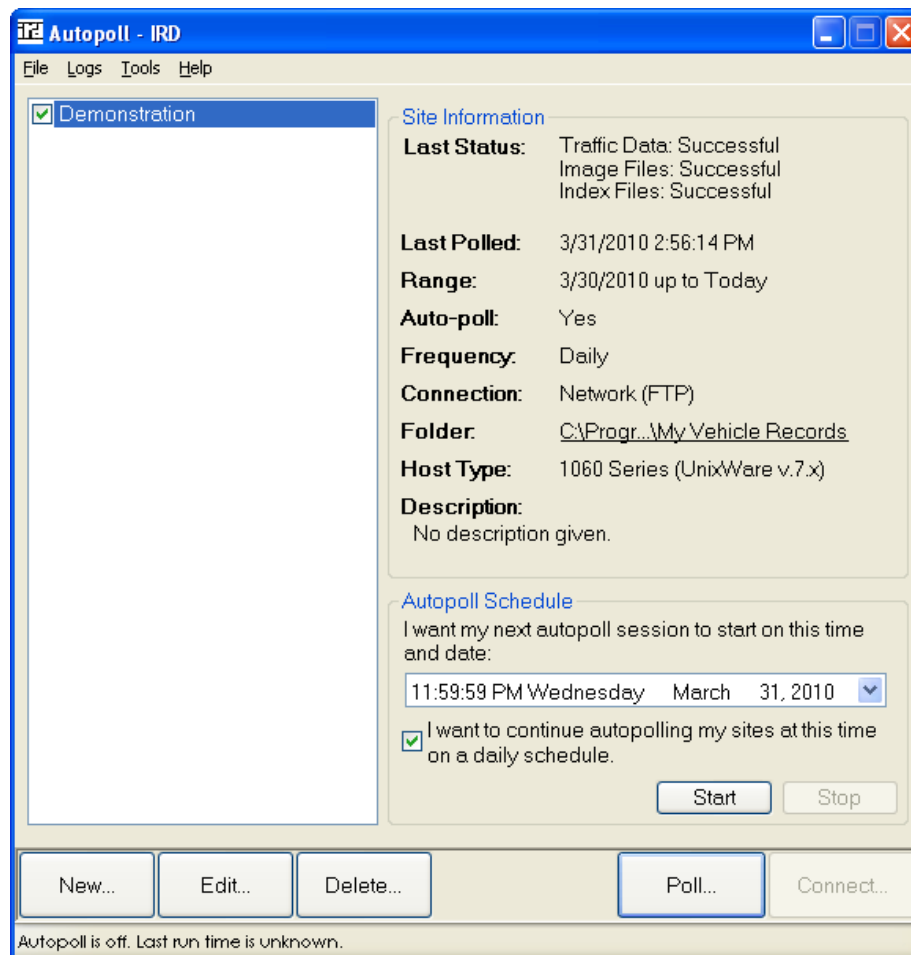
2.6 POST INSTALLATION

After installation has completed refer to the **Read Me** file for important information regarding Autopoll. Go to: **Start → Programs → IRD → Autopoll → Read Me** to open the Read Me file.

Additionally, the **What's New** file provides a summary of new features and bug fixes since the last release.

3.0 AUTOPOLL MAIN WINDOW

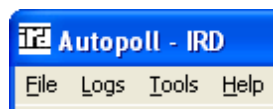
When Autopoll starts, the main window will be displayed:



The parts of the screen are described below

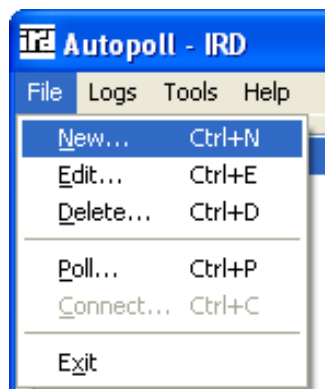
3.1 TOOLBAR MENUS

The Autopoll menu bar at the top left of the main window has four drop down menus:



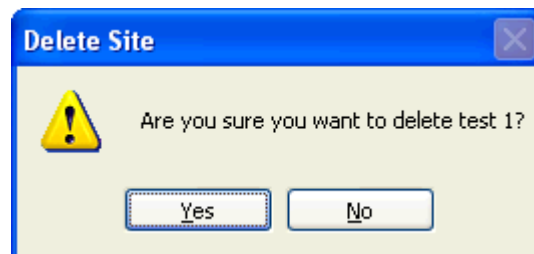
Click a menu label to display its drop down menu.

3.1.1 FILE



The **File** drop down menu lists the options for working with a site connection file. These options are also available as buttons along the bottom of the main Autopoll window.

- **New** – opens the **Create a New Site** window; refer to section 4.0.
- **Edit** – opens the **Edit Site** window; refer to section 4.0.
- **Delete** – deletes the site selected in the site list (see section 3.2); a confirmation request will be displayed:

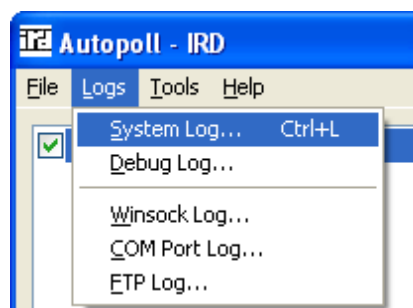


Click **Yes** to complete the site deletion.

- **Poll** – starts an immediate poll of the enabled sites, refer to section 5.0.
- **Connect** – opens a terminal connection session with the device at the selected site. This option is currently disabled.
- **Exit** - shuts down Autopoll and closes the window.

3.1.2 Logs

The **Logs** menu lists the various log files that are available:



Autopoll maintains text format logs that detail important actions, events and errors that occur in the system.

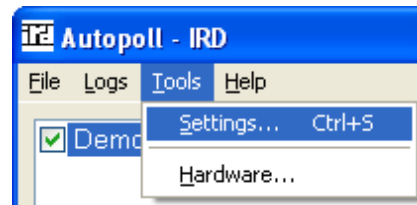
The log files are stored at **C:\IRD\Autopoll\log**.

- **System Log** – opens the log of system activity, events, and errors. An example of the format and common log entries found in the system log is listed in Appendix A.1
- **Debug Log** – opens the log of system errors and exceptions, if it exists.
- **Winsock Log** – opens the log of TCP socket communications information, if it exists; this log is not used during normal operations
- **COM Port Log** – opens the log of COM port communications information, if it exists; this log is not used during normal operations.
- **FTP Log** – Opens the log of FTP communications information, if it exists; this log is not used during normal operations.

If any or all of the Winsock, COM Port or FTP log files have not been enabled on the system, no log file will be created for that parameter. If a log file that does not yet exist is selected here, an alert message stating that the file cannot be found will be displayed, the log file will be created and then the empty file will be displayed.

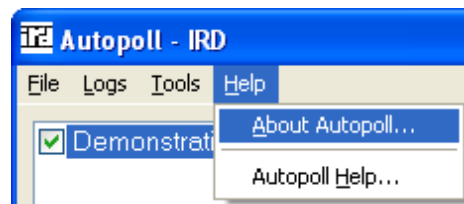
3.1.3 TOOLS

The **Tools** menu lists the various tools that are available.

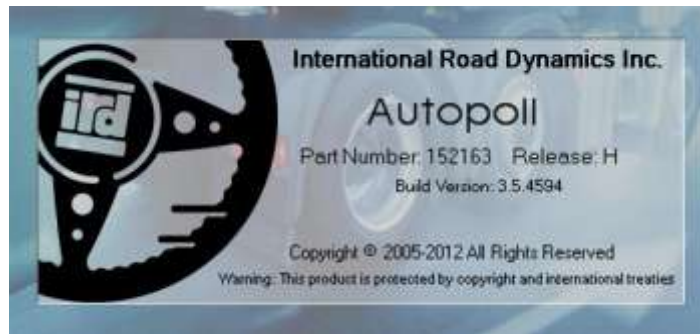


- **Settings** – opens a window that displays system settings and preferences. Refer to section 7.0.
- **Hardware** – opens a window that displays the remote connection hardware on this computer. Refer to section 6.0.

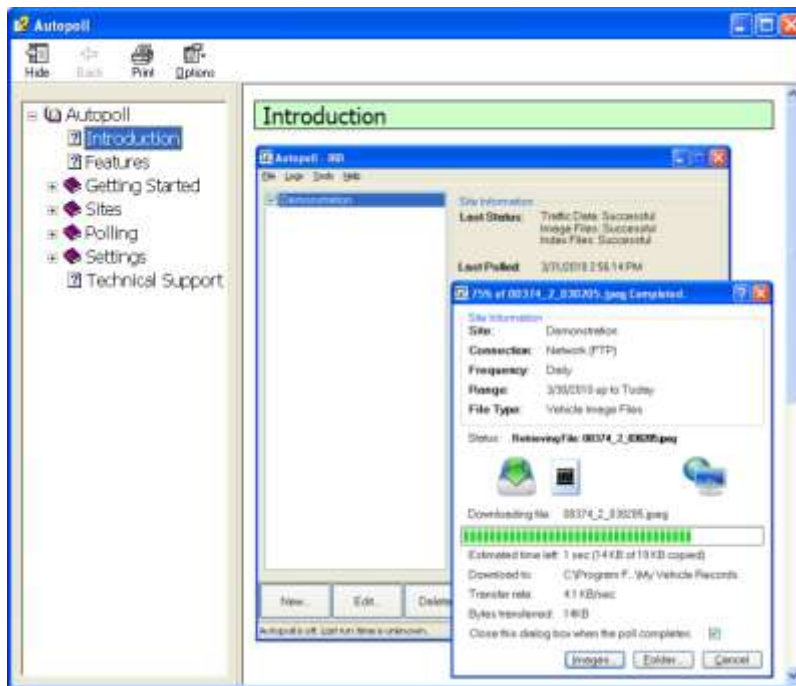
3.1.4 HELP



- **About Autopoll** - lists the version number of this Autopoll software release.

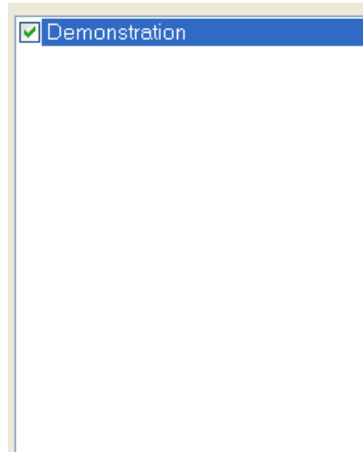


- **Autopoll Help** -opens the Autopoll **Help** documentation:



3.2 SITE LIST

At the left side of the main window is a listing of all data collection sites configured on this system:



Click a site name in the list to select it.

Click the checkbox to the left of a site name to enable that site for manual polling (indicated by a green checkmark in the box).

3.3 SITE INFORMATION

The area under the **Site Information** label displays information about the selected system:

A screenshot of a 'Site Information' panel. It has a title bar with the text 'Site Information'. Below the title bar, there are several fields with labels and values. The labels are in bold. The values are in a standard font. The fields are: 'Last Status' with values 'Traffic Data: Successful', 'Image Files: Successful', and 'Index Files: Successful'; 'Last Polled' with value '3/31/2010 2:56:14 PM'; 'Range' with value '3/30/2010 up to Today'; 'Auto-poll' with value 'Yes'; 'Frequency' with value 'Daily'; 'Connection' with value 'Network (FTP)'; 'Folder' with value 'C:\Progr...\My Vehicle Records'; 'Host Type' with value '1060 Series (UnixWare v.7.x)'; and 'Description' with value 'No description given.'.

Last Status:	Traffic Data: Successful Image Files: Successful Index Files: Successful
Last Polled:	3/31/2010 2:56:14 PM
Range:	3/30/2010 up to Today
Auto-poll:	Yes
Frequency:	Daily
Connection:	Network (FTP)
Folder:	C:\Progr...\My Vehicle Records
Host Type:	1060 Series (UnixWare v.7.x)
Description:	No description given.

The information fields will be blank until a site is selected from the field labeled **Site List** or a new site is created.

When a site is selected, the information for that site will be displayed.

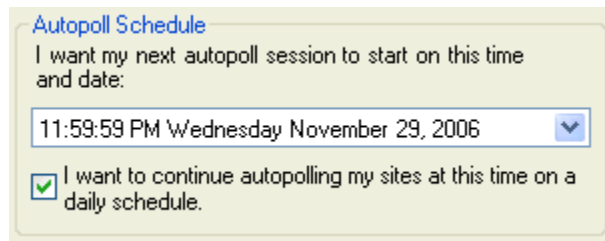
The fields are:

- **Last Status** – whether or not the data retrieval of different data types was successful.
- **Last Polled** – the time and date of the most recent connection attempt to the selected site.
- **Range** – The time period of data to be collected.

- **Autopoll** – whether or not automatic polling is enabled.
- **Frequency** – how often Autopoll will attempt to connect to the sight to retrieve data.
- **Connection** – the port connection protocol, followed by the file transfer protocol in brackets.
- **Folder** – the directory in which the downloaded data files will be saved.
- **Host Type** – the type of data collection machine at the data collection site to which Autopoll will connect to download data.
- **Description** – the optional description of the data collection site.

3.4 AUTOPOLL SCHEDULE

The Autopoll schedule is set by selecting a time and date in the area labeled **Autopoll Schedule** on the main window and then clicking the **Start** button:



Click on any part of the time and/or date and enter a new value to change that part, or click the down arrow at the right end of the field to display a calendar on which the date for the next poll attempt may be selected.

To continue polling all sites at the selected time following the selected date, enable the checkbox.

The time set here will override the default start time of midnight.

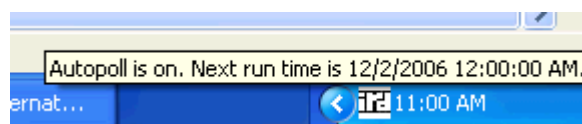
3.5 START/STOP

The **Start** button enables automatic polling; when the next scheduled polling session time is reached, the enabled sites will be polled.

Note: Autopoll *MUST* be running to perform automatic polling; if Autopoll is not running or automatic scheduled polling is not started, polling will only be performed when the manual **Poll** button is used.

The **Stop** button disables automatic polling.

The Start/Stop status of Autopoll may be determined by moving the mouse cursor over the Autopoll icon in the system tray at the bottom right corner of the monitor. A status message will be displayed:



3.6 BUTTONS

At the bottom of the window is a row of buttons to select a function to perform on a site connection. These options are also available under the **File** drop down menu.

- **New** – opens the **Create a New Site** window; refer to section 4.0.
- **Edit** – opens the **Edit Site** window; refer to section 4.0.
- **Delete** – deletes the selected site from the sites list; a confirmation message will be displayed, click **Yes** to complete the deletion.
- **Poll** – Performs an immediate manual download from the enabled sites (sites in the **Site List** on the main window with their checkbox selected); refer to section 5.0.
- **Connect** – opens a terminal connection session with the device at the selected site (this option is currently disabled).
- **Exit** - shuts down Autopoll and close the window.

To create a new site, click the **New Site** Button.

To edit an existing site, select the site from the **Site List**, and then click the **Edit Site** button; the fields that can be edited will be displayed in white with their current values.

To delete an existing site, select the site from the **Site List**, and then click the **Delete Site** button; a confirmation screen will be displayed, click **OK** to complete the deletion.

4.0 NEW SITE / EDIT SITE

The windows displayed when either the **New** or the **Edit** function is selected (either from the menu or by clicking the button) are identical, except for the title bar and the fields in the **Create New Site** window will be blank, while those in the **Edit Site** window will display the configuration for the selected site.

Create a New Site

Site Information | Data To Download | Schedule | Connection | Transfer Protocol

Name: Ext.

Description (Optional):

Use timezone information (affects file timestamps) ☐

Include this site when performing an autopoll session. ☒

Download Folder:

Remote Host:

User Name:

Password:

Retries:

The **New Site /Edit Site** window contains the following tabs:

4.1 SITE INFORMATION

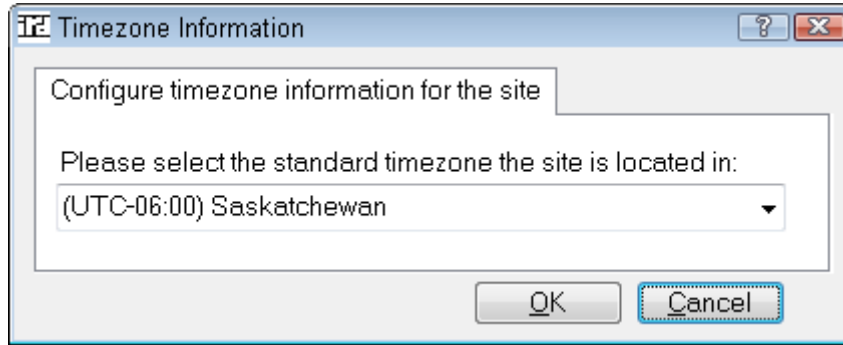
The **Site Information** tab contains the fields that define the site parameters:

The screenshot shows a Windows-style dialog box titled "Create a New Site". It has five tabs: "Site Information" (selected), "Data To Download", "Schedule", "Connection", and "Transfer Protocol". The "Site Information" tab contains the following fields and controls:

- Name:** A text input field.
- Ext.:** A text input field for file extension.
- Description (Optional):** A large text area.
- Use timezone information (affects file timestamps):** A checkbox that is currently unchecked, followed by a "Configure" button.
- Include this site when performing an autopoll session:** A checkbox that is checked.
- Download Folder:** A text field showing "C:\Users\Public\Documents\IRD\Autopoll\My Ve" and a "Browse" button.
- Remote Host:** A dropdown menu showing "iSINC" and a "Configure" button.
- User Name:** A text field showing "autopoll".
- Password:** A text field with masked characters "xaxaxaxax".
- Retries:** A spin box set to the value "3".

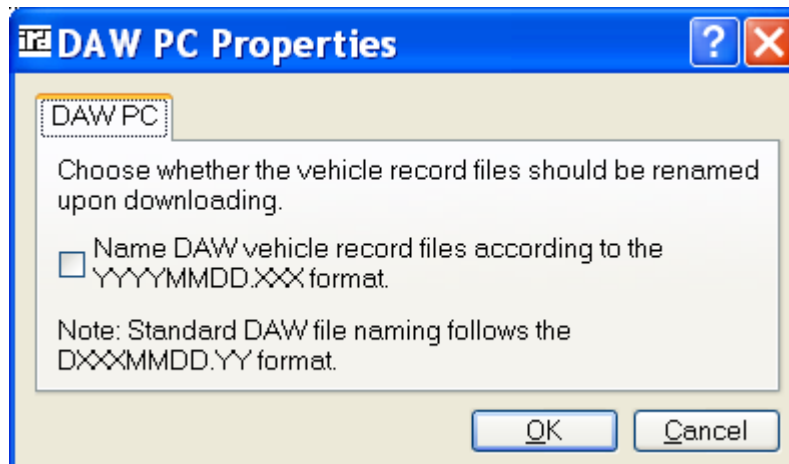
At the bottom right of the dialog are "OK" and "Cancel" buttons.

- **Name** – the site name (alphanumeric characters only, maximum 32 characters).
- **Ext.** – the filename extension (alphanumeric characters only). Note that the extension is used by some data analysis programs to identify the site and so must be unique for each. When polling an iSINC remote host type leaving this field blank will download all files with a standard filename and any file extension. This may be useful if an iSINC is creating two different data files.
- **Description** – an optional description of the data collection site.
- **Use timezone information (affects file timestamps)** – select this checkbox if this site is located in a different timezone from the machine on which Autopoll is run.
Note: if this option is not used, Autopoll will assume the site is in the same timezone as the computer it is being run on.
- **Configure** – click the Configure button to display a dialog box to select the timezone in which the site is located:

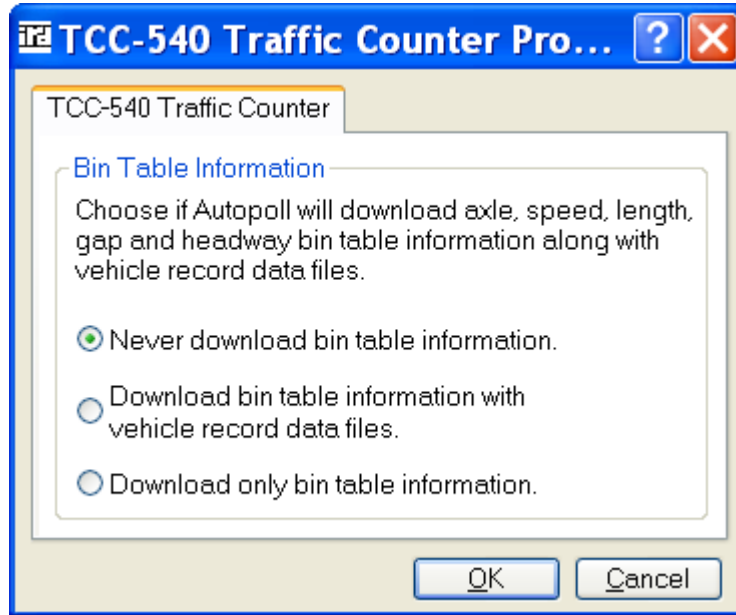


- **Include this site when performing an Autopoll session** – select this checkbox if this site is to be polled when the system performs an Autopoll session.
Note: *this checkbox must be enabled if the site is to use the schedule option selected in the **Schedule** tab (section 4.3).*
- **Download Folder** – the path to the folder to save the downloaded files. The default is C:\Program Files\IRD\Autopoll\My Vehicle Records; to select another location, click the **Browse** button and browse to the directory to be used.
- **Remote Host Type** – the remote host type of the selected site.
- **Configure** – if the Remote Host Type is DAW 100/190 or TCC-540, then this button will be activated.

If the Remote Host Type is DAW 100.190, selecting Configure will open a dialog box to enable or disable using files named in the YYYYMMDD.XXX format (where YYYY is year, MM is month number, DD is day of the month and XXX is the extension):



If Remote Host Type is TCC540, selecting Configure will open a dialog box to select the type of data that is downloaded: only vehicle record files, both vehicle record and binned data or only binned data:



- **User Name** – if the remote host connection requires a login, this is the name to be entered to login.
- **Password** – if the remote host connection requires a password, this is the password to be entered to log in.
- **Retries** – the number of times Autopoll is to attempt to make a connection and complete a poll session for this site. A failed polling session may be due to being unable to connect, a dropped connection or a failure in the file transfer protocol that results in the polling session being terminated. Increase or decrease the number of retries using the up or down arrow to the right of the number.

4.2 DATA TO DOWNLOAD

The **Data To Download** tab specifies the range of dates for the data that is to be retrieved. To ensure that no data is missed, check that the date range specified here is equal to or longer than the time between polling sessions specified on the **Schedule** tab.

Edit Site: Demonstration

Site Information | **Data To Download** | Schedule | Connection | Transfer Protocol

Date Range

Choose the range of data files that will be downloaded when this site is polled.

☐ Retrieve all files since the last successful poll

☐ Today's vehicle data

☒ From 1 days ago up to today

☐ From 1 days prior up to 0 days ago

☐ Always between the start and end dates:

Start Date: 8/ 1/2012

End Date: 8/ 1/2012

Image/Index Files

Autopoll can download vehicle image and/or index files along with the traffic data files using the FTP file transfer protocol through a network connection.

☒ I want to download image and/or index files as well as traffic data.

Configure

OK Cancel

- **Retrieve all files since last successful poll** – if this checkbox is enabled, Autopoll will keep track of when the most recent successful download occurred and when the next polling session occurs, will download all data from this site that was collected after that time/date.
- **Today's vehicle data** – the data recorded since midnight at the start of today.
- **From n days ago up to today** – select the number of days prior to today to be included in the download. This will not download the current day's file.
- **From n days prior to m days ago** – select the range of days prior to today to be included in the download. If n and m are both 0, this will download today's file.
- **Always between the start and end dates:** - if this radio button is selected, the **Start Date** and **End Date** field are activated; select the start and end dates on the calendars.

Examples

In all cases, start days are inclusive and end days are exclusive as shown in the following examples:

- **From 5 days ago up to today** – will download data from the 5 days preceding today but not today's data.
- **From 2 days prior to 1 days ago** – will download data from the 2 days preceding yesterday but not yesterday's data.
- **Start Date = March 1, 2010; End Date = April 1, 2010** – will download data files for all days from March 1, 2010 up to and including March 31, 2010 but not April 1, 2010.

4.2.1 IMAGE/INDEX FILES

To download image and/or index files from a site, check the **I want to download image and/or index files as well as traffic data** checkbox. Then click the **Configure** button to open the **Image Download Configuration** dialog window.

If **Vehicle Image** is checked, the user may set the following parameters to control the image downloading:

- **Remote Folder** – Set the path on the remote host to the folder the image files are to be downloaded from. Note that the directory separator character, '*/*' in the screenshot above, must match that used on the remote host.
- **Local Folder** – Set the path on the local computer to the folder the image files are to be downloaded to. The **Browse** button can be used to navigate to and select the folder.
- **File Extensions** – Set the file extensions of the image files to be retrieved. Multiple extensions can be entered by separating each extension with a semi-colon, ';'.
- **Parse remote folder for archive subfolders** – Enable this checkbox if Autopoll should parse the remote folder for image archive subfolders. Some systems have an image archiving mechanism which moves all images for a given day into a subfolder named similarly to the data files with the date and site id. When downloaded this archive directory structure will be maintained in the local folder. If enabled, select which archival system to follow.
If **ISINC (...YYYYMMDD\HH*)** format is selected, specify the hours during the day which are to be downloaded, individual hours may be specified by entering the hour numbers (from 0 to 23), separated by commas; a range of hours may

be specified by entering the first hour in the range, a dash and then the last hour number.

- **Download a specified number of images** – Check this checkbox to restrict Autopoll to retrieving only a subset of all the images available on the remote host. Two options are available to do this:
 - **Number of images spaced throughout date range** - select this option to set the maximum number of images to retrieve which are spaced equally apart over the list of all images available for the date range specified (on the site's **Data To Download** tab).
 - **Number of random images** - select this option to set the maximum number of images to retrieve which are selected at random from the list of all images available for the date range specified (on the site's **Data To Download** tab).

These options are useful if the purpose of downloading images is simply to monitor the quality of images being captured on site.

Check the **Vehicle Index** checkbox if the index files are to be downloaded from the older style 1060 UnixWare Virtual WIM systems.

Image and index file transfers are done using only FTP or SFTP transfer protocol. Fill in the connection and login information to be used for this FTP connection for image/index file transfer.

If there are problems transferring files with due to firewalls, change the **Enable FTP Active mode** checkbox.

If the connection is already specified as an FTP or SFTP connection, or if the vehicle images and index should be transferred using the standard connection information, check the **I want Autopoll to download ...** checkbox.

Click **OK** to save the image/index download configuration or **Cancel** to discard the changes and close the window.

4.3 SCHEDULE

The **Schedule** tab sets how often the site should be polled as part of the automatic scheduled poll.

The **Autopoll Schedule** area of the main window sets when automatic polling of the enabled remote hosts is performed each day. By default, a scheduled poll always begins at midnight on the end of the selected day/date. This may be changed in the **Autopoll Schedule** section of the main window (section 3.4). The settings in the **Schedule** tab set how often a site is polled during the scheduled polling sessions.

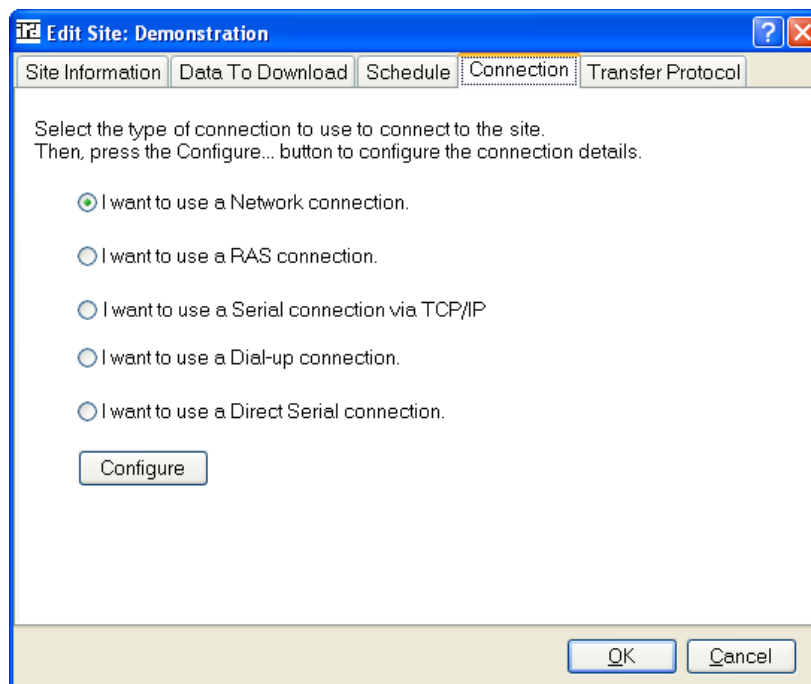
The screenshot shows a dialog box titled "Edit Site: Demonstration" with a blue title bar and standard Windows window controls. It has five tabs: "Site Information", "Data To Download", "Schedule" (which is selected and highlighted with a yellow border), "Connection", and "Transfer Protocol". The "Schedule" tab contains the following text: "Choose how often this site should be polled when performing an autopoll session." Below this are three radio button options: "Daily" (selected), "Weekly", and "Monthly". The "Weekly" option has seven checkboxes for "Sun", "Mon", "Tue", "Wed", "Thu", "Fri", and "Sat". The "Monthly" option has a text input field with a yellow background. Below the input field is the text "Enter days separated by commas. For example: 1, 8, 15, 22" and a checkbox labeled "Last day of the month." At the bottom right of the dialog are "OK" and "Cancel" buttons.

- **Daily** – if the **Daily** radio button is selected, the remote hosts will be polled every day.
- **Weekly** – if the **Weekly** radio button is selected, the days of the week checkboxes will be enabled; select the day or days of the week on which polling is to be done.
- **Monthly** – if the **Monthly** radio button is selected, the dates field and **Last day of the month** checkbox will be activated. Enter the days of the month on which data polling is to be done; if polling is to be performed at the end of the month, enable the and **Last day of the month** checkbox.

Note: if a day of the month is entered that is greater than number of days in a selected month (e.g. Feb. 30, Apr 31, etc.), the task will NOT be performed on that day for those months. The recommended method for doing end of month data retrieval is to enable the **Last day of the month** checkbox.

4.4 CONNECTION

The **Connection** tab defines the connection between this computer and the remote host:

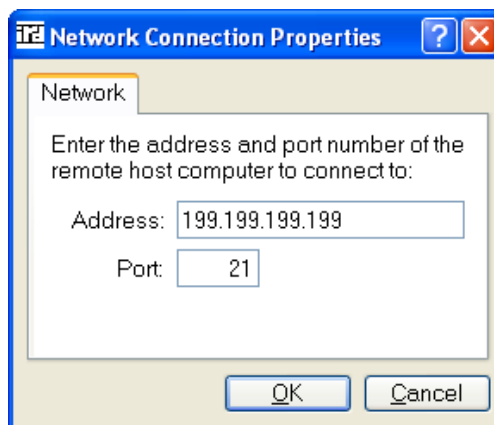


Select the connection protocol to be used. If a connection type is not available for remote host type selected in the Site information, that selection will be disabled (indicated by the connection type being grayed-out).

- **Configure** – once a connection protocol has been selected, click the **Configure** button to set the communication parameters; a Properties window appropriate to the selected protocol will open. The Properties window for each protocol is described below:

4.4.1 NETWORK CONNECTION

The **Network Connection Properties** window sets the IP address and port number to be used to connect to the remote host device:



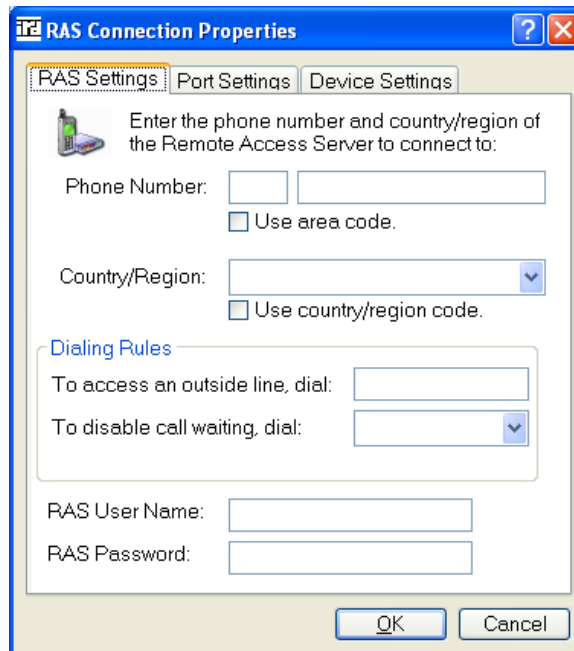
When the Transfer Protocol used over the network connection is FTP, **Port** should be set for an FTP connection (default FTP port is 21). When the protocol is YModem or ZModem, **Port** should be set for a Telnet connection (default Telnet port is 23). If the connection is through a router or other device which changes these ports, set the Port accordingly.

Click **OK** to save the configuration or **Cancel** to discard the changes and close the window.

4.4.2 RAS CONNECTION

The **RAS Connection Properties** window has three panels to configure the Remote Access Server connection:

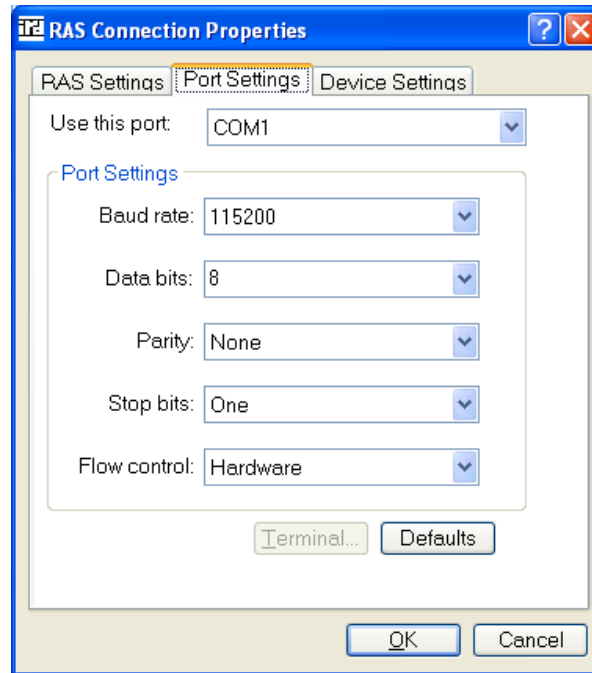
4.4.2.1 RAS Settings:

The screenshot shows the 'RAS Connection Properties' dialog box with the 'RAS Settings' tab selected. The dialog has three tabs: 'RAS Settings', 'Port Settings', and 'Device Settings'. The 'RAS Settings' tab contains a text box for 'Phone Number' with a 'Use area code' checkbox below it. Below that is a 'Country/Region' dropdown menu with a 'Use country/region code' checkbox. A 'Dialing Rules' section contains two text boxes: 'To access an outside line, dial:' and 'To disable call waiting, dial:'. At the bottom are 'RAS User Name' and 'RAS Password' text boxes, and 'OK' and 'Cancel' buttons.

- **Phone Number** – enter the telephone number of the host connection. Include the area code if the remote host is outside the local calling area.
- **Use area code** – if the area code must be dialed to reach the remote host, select this checkbox.
- **Country/Region** – if the remote host is outside the local area code, select the Country/Region code.
- **Use country/region code** – if the remote host is in a different country/region than this computer so that the country/region code must be dialed to reach the remote host, select this checkbox.
- **Dialing rules** – if this computer has to call out through an office exchange that uses a prefix number to get an outside line or has call waiting, enter the required codes here:

- **To access an outside line** – enter the outside line access number.
- **To disable call waiting** – select the call waiting disable code from the drop down list.
- **RAS User Name** – enter the user name for this RAS connection.
- **RAS Password** – enter the password for this RAS connection.

4.4.2.2 Port Settings:

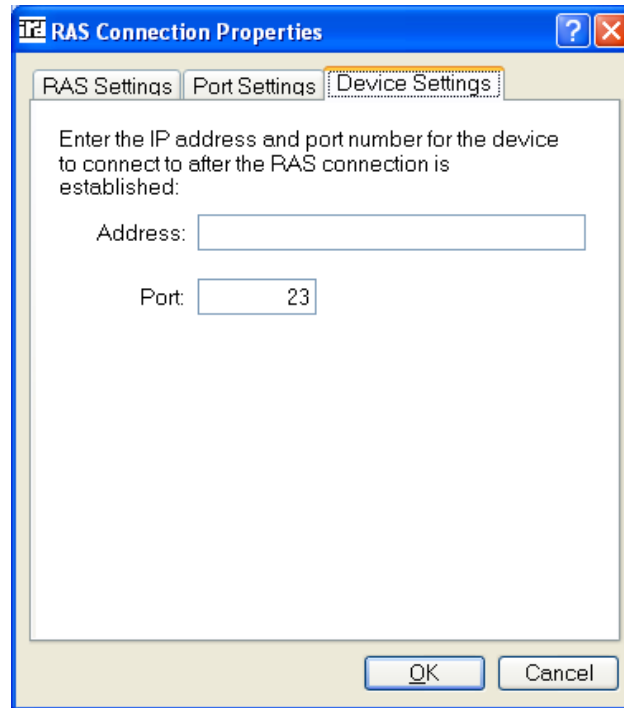


- **COM Port Number** – select the COM port on this computer that will be used for the RAS connection to the remote host.
- **Bits per second** – select the transmission speed for the connection.
- **Data bits** – select the number of data bits per byte.
- **Parity** – select the type of parity bit checking used.
- **Stop bits** – select the number of stop bits used.
- **Flow control** – select whether or not hardware flow control is used.

At the bottom of the window are two additional buttons:

- **Terminal** – not functional in this window.
- **Defaults** – resets the fields to the default settings (as shown in the illustration above).

4.4.2.3 Device Settings:



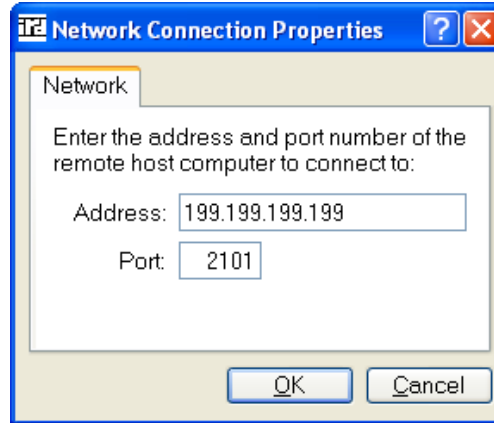
- **Address** – sets the IP address to be used to connect to the remote local host device.
- **Port** – sets the port number to be used to connect to the remote local host device

When the transfer protocol used over the network connection is FTP, **Port** should be set for an FTP connection (default FTP port is 21). When the protocol is YModem or ZModem, **Port** should be set for a Telnet connection (default Telnet port is 23). If the connection is through a router or other device which changes these ports, set the Port accordingly.

Click **OK** to save the configuration or **Cancel** to discard the changes and close the window.

4.4.3 SERIAL OVER IP

Serial Over IP uses a raw TCP/IP connection for polling serial devices that are connected to a network via a serial to Ethernet conversion device such as a port server (manufactured by Digi International or MOXA) or a wireless modem.

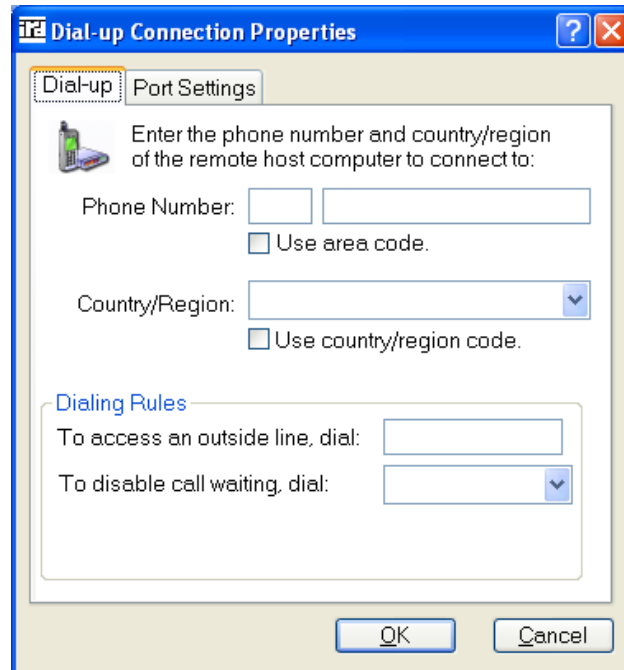


- **Address** – sets the IP address to be used to connect to the remote local host device.
- **Port** – sets the port number to be used to connect to the remote local host device. **Port** should be set to a network port which is open for raw TCP/IP and is not a Telnet or FTP port.

4.4.4 DIAL-UP

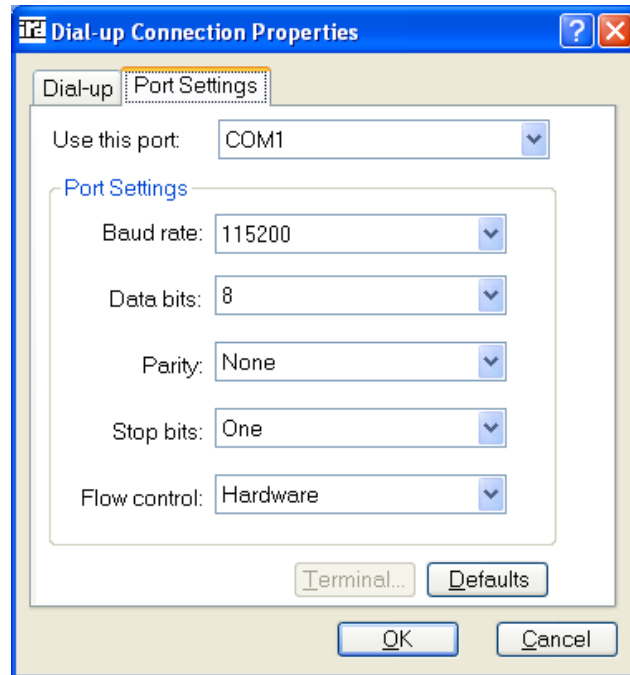
The **Dial-up Connection Properties** window has two panels:

4.4.4.1 Dial-up:



- **Phone Number** – enter the telephone number of the host connection. Include the area code if the remote host is outside the local calling area.
- **Use area code** – if the area code must be dialed to reach the remote host, select this checkbox.
- **Country/Region** – if the remote host is outside the local area code, select the Country/Region code.
- **Use country/region code** – if the remote host is in a different country/region than this computer so that the country/region code must be dialed to reach the remote host, select this checkbox.
- **Dialing rules** – if this computer has to call out through an office exchange that uses a prefix number to get an outside line or has call waiting, enter the required codes here:
 - **To access an outside line** – enter the outside line access number.
 - **To disable call waiting** – select the call waiting disable code from the drop down list.

4.4.4.2 Port Settings



- **COM Port Number** – select the COM port on this computer that will be used for the dial-up connection to the remote host.
- **Bits per second** – select the transmission speed for the connection.
- **Data bits** – select the number of data bits per byte.
- **Parity** – select the type of parity bit checking used.
- **Stop bits** – select the number of stop bits used.
- **Flow control** – select whether or not hardware flow control is used.

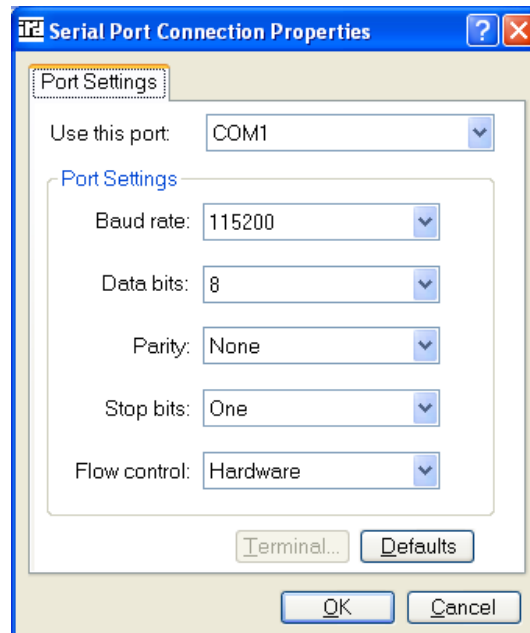
At the bottom of the window are two additional buttons:

- **Terminal** – not functional in this window.
- **Defaults** – resets the fields to the default settings (as shown in the illustration above).

Click **OK** to save the configuration or **Cancel** to discard the changes and close the window.

4.4.5 SERIAL

The **Serial Port Connection Properties** window configures the port settings to be used to connect to the remote local host device:



- **COM Port Number** – select the COM port on this computer that will be used for the serial connection to the remote host.
- **Bits per second** – select the transmission speed for the connection.
- **Data bits** – select the number of data bits per byte.
- **Parity** – select the type of parity bit checking used.
- **Stop bits** – select the number of stop bits used.
- **Flow control** – select whether or not hardware flow control is used.

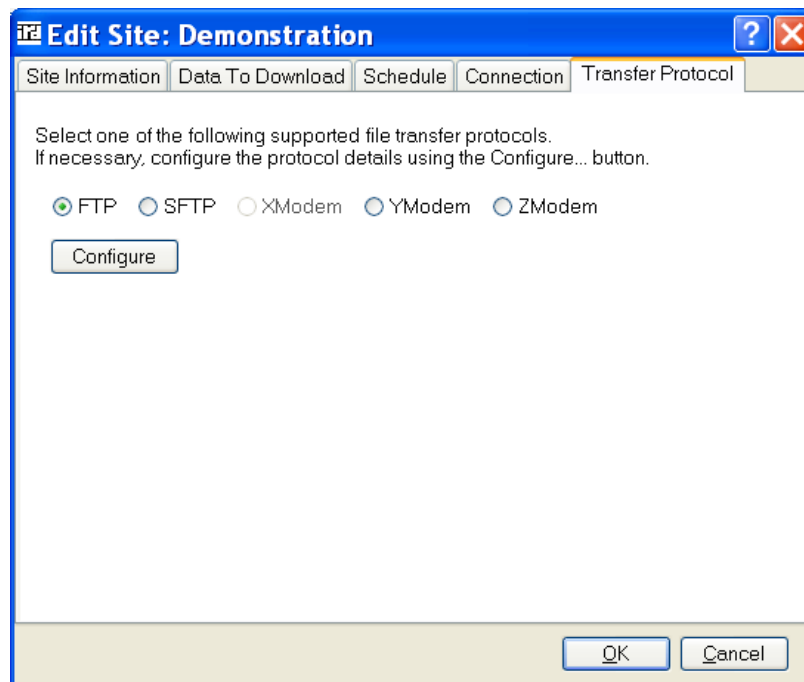
At the bottom of the window are two additional buttons:

- **Terminal** – not functional in this window.
- **Defaults** – resets the fields to the default settings (as shown in the illustration above).

Click **OK** to save the configuration or **Cancel** to discard the changes and close the window.

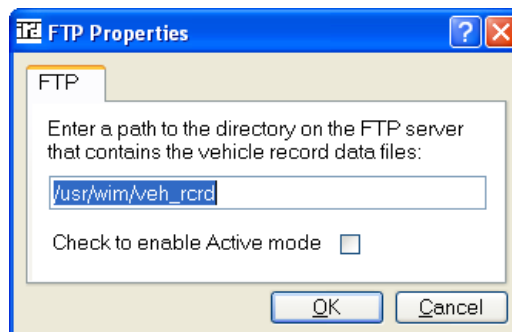
4.5 TRANSFER PROTOCOL

Once the remote host type is selected in the **Site Information** tab, the **Transfer Protocol** appropriate to that type will be enabled in the **Transfer Protocol** tab:



- **Configure** – only **FTP** and **SFTP** protocols require configuration; if either of these protocols is to be used, click the **Configure** button to open a configuration window (described below). **Xmodem**, **YModem** and **ZModem** do not require configuration.

4.5.1 FTP/SFTP PROPERTIES



Enter the path to the directory on the remote host that the files to be transferred are located. The '/' directory separator must match that used on the remote host.

If there are problems transferring files with FTP due to firewalls, the user may change the **Check to enable Active mode** checkbox.

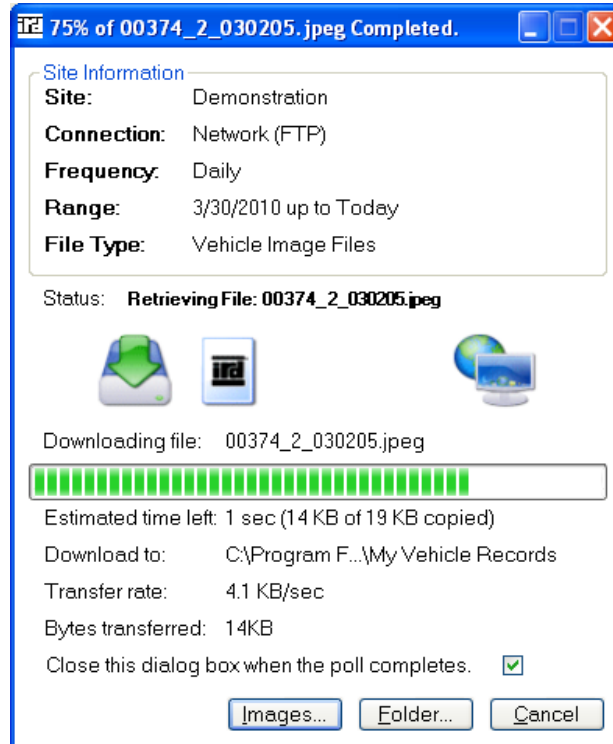
Click **OK** to save the configuration or **Cancel** to discard the changes and close the window.

4.6 OK/CANCEL

Once all the changes have been made in the **Create New** or **Edit Site** window, click **OK** to save the configuration or **Cancel** to discard the changes and close the window.

5.0 POLL

When an immediate poll of the enabled sites is initiated either from the **Files** menu or by clicking the **Poll** button or an automatic schedule poll is in progress, a status window will be displayed:



Site information – this area displays the site that is currently being polled:

- The field labeled **Site** shows the name of the site.
- The field labeled **Connection** shows the port connection protocol, followed by the file transfer protocol in brackets.
- The field labeled **Frequency** shows how often the site is polled for vehicle record data.
- The field labeled **Range** shows the date range of vehicle records that will be polled.
- The field labeled **File Type** shows the type of data currently being retrieved.

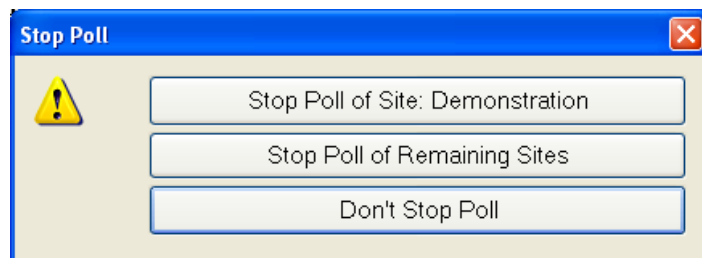
The field labeled **Status** shows the steps being performed by Autopoll during the polling process. These steps are:

- Connecting to site...
- Sending file transfer information...
- Downloading vehicle record data file...
- File download completed.
- Site poll completed.

Note: *minimizing this dialog box will also minimize the Autopoll main window.*

If the poll fails or can not connect to the remote host, the **Status** field will show **Connection failed** and a message indicating the reason for the failure. These reasons are logged in the log file (See appendix A.0).

- **Downloading file** – the name of the file being downloaded.
- Below the downloading file name is a progress bar. If the size of the file is known, the progress bar will fill to give an approximate indication of the proportion of the file that has been downloaded.
- **Estimated time left** – if the size of the file being downloaded is known, an estimate of the remaining time in seconds for the download to complete will be displayed, followed by the number of total bytes copied so far in brackets.
- **Download to** – the folder in which the current file will be saved; this will be the folder specified in the site configuration (refer to section 4.1). This can be opened using the **Folder** button below.
- **Transfer rate** – the speed in bytes per second (if available) at which the file is being downloaded.
- **Bytes Transferred** – the number of bytes which have been transferred so far.
- **Close this dialog box when the poll completes** – this checkbox is normally enabled so that the window closes automatically once the polling session is finished. When unchecked, the user must click on the **Close** button (or the **Cancel** button after the poll completes) to close the **Polling** window
- **Images** – during transfer of Vehicle Image files, the user may select this button to open a second window for previewing each image file after it is downloaded.
- **Folder** – opens the folder that the file is being downloaded to.
- **Cancel** – opens the stop poll dialog. Note that the poll will continue in the background until one of the buttons in this dialog is pressed.

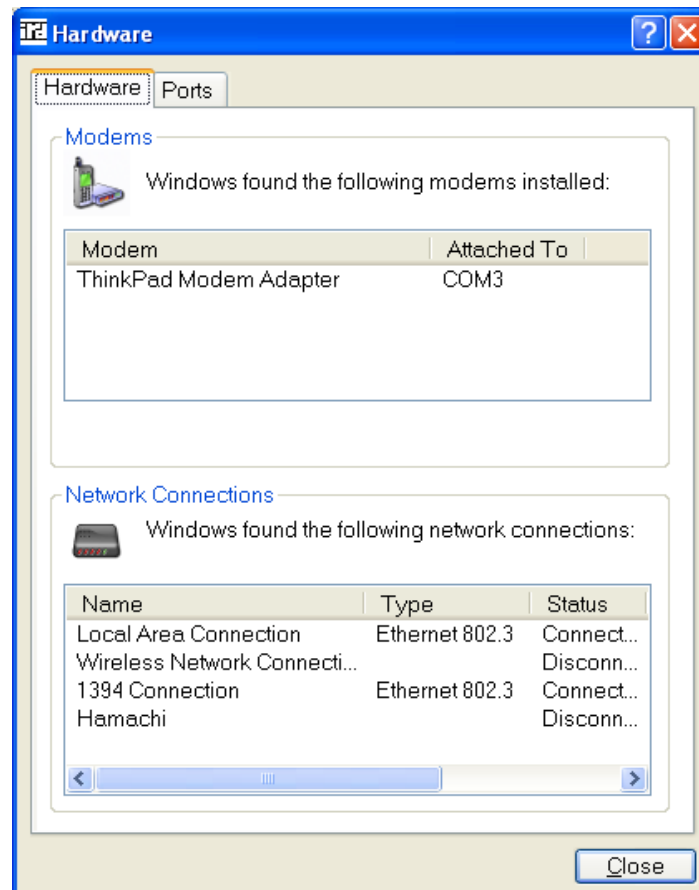


- **Stop Poll of Site: XXXXX** – Stops the poll all data types from the current site but will continue to poll any remaining sites.
- **Stop Poll of Remaining Sites** – Stops the poll of all remaining sites including the current site.
- **Don't Stop Poll** – Continues the poll of the current site and all remaining sites.

6.0 HARDWARE

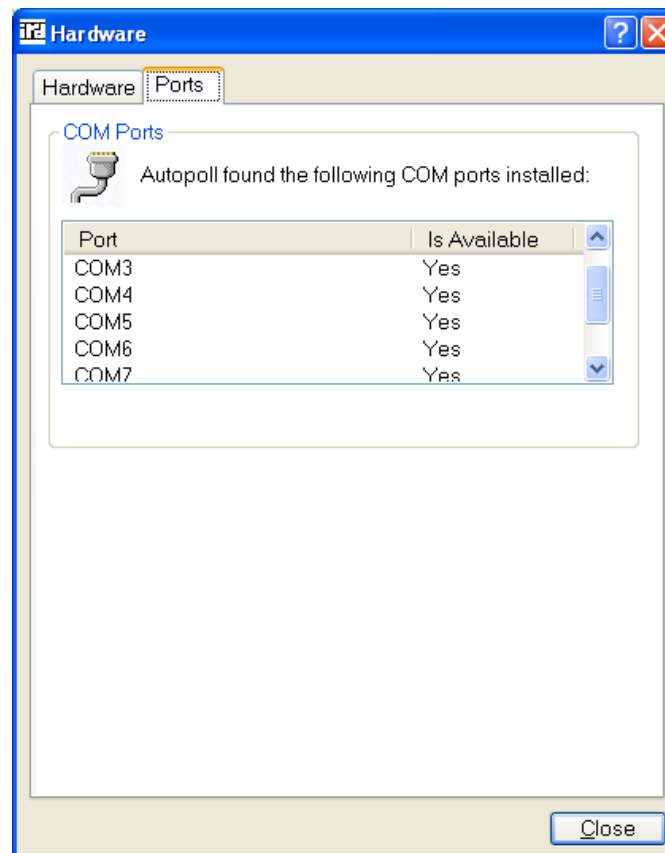
When the **Hardware** option is selected from the **Tools** menu, a window that displays the connection hardware available on this computer is displayed. The window has two panels:

6.1 HARDWARE



- **Modems** – the modems area lists any modems available from this computer.
- **Network Connections** – the Network Connections area lists the network connections on this computer.

6.2 PORTS



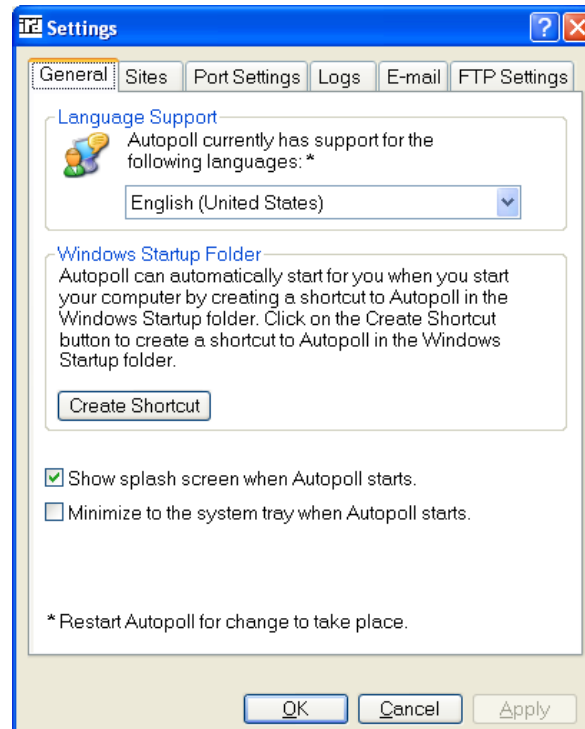
- **Ports** – the ports area lists the communications ports available on this computer.


7.0 SETTINGS

When the **Settings** option is selected from the **Tools** menu, a window that displays the system settings on this computer is displayed. The window has six panels.

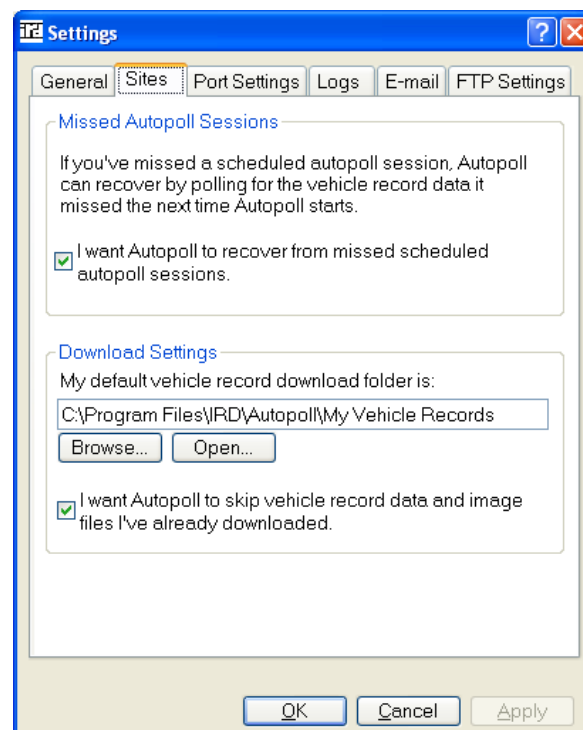
Once all the changes have been made on all panels, click **OK** to save the configuration or **Cancel** to discard the changes and close the window.

7.1 GENERAL



- **Language** – the language currently selected for Autopoll. If available, any additional language options will be displayed in the drop down menu; click on another language to change to that language.
- **Windows Startup Folder/Create Shortcut** – to make Autopoll start automatically each time this computer is started, click the **Create Shortcut** button.
- **Show splash screen when Autopoll starts** – if this checkbox is enabled the Autopoll splash screen (see illustration below) will be displayed while the Autopoll program is starting up.
- **Minimize to the system tray when Autopoll starts** – if this checkbox is enabled, Autopoll will be displayed as the icon  in the Windows system tray normally found at the bottom right corner of the monitor screen; the main Autopoll window will not be displayed.

7.2 SITES



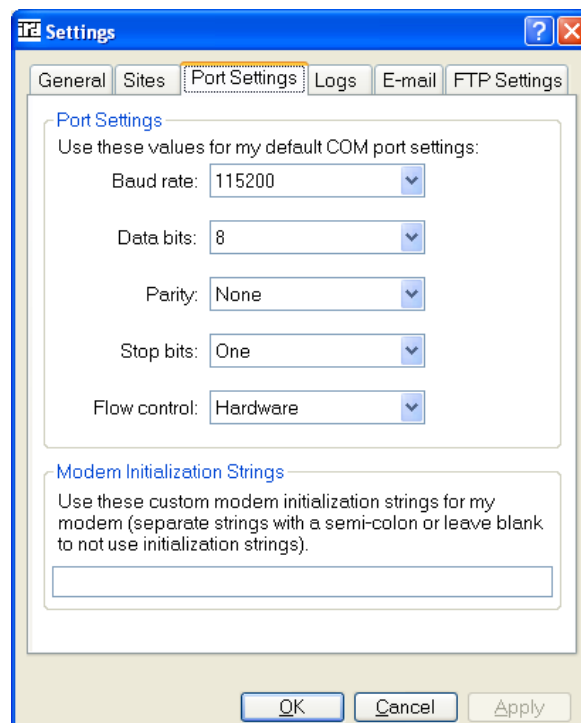
- **Missed Autopoll Sessions** – if Autopoll is configured to automatically poll at a scheduled time and it is not running at the scheduled time, checking this checkbox will direct Autopoll to attempt to download any data from the missed automatic polling sessions the next time it is run. If this checkbox is not checked, the data which would have been retrieved during the missed scheduled poll may not be retrieved.
- **My default vehicle record download folder is** – this field displays the path to the default folder that will be set when a new site is being configured. The folder can be changed in the **New/Edit Site** window (refer to section 4.1). The default can be changed by entering a new path in this field or using the **Browse** button (see below).
- **Browse** – to select a new default folder, click this button and navigate to the new location:



- **Make New Folder** – click this button to create a new folder.
- **OK** – make the selected folder the new default folder.
- **Cancel** – close this window without changing the default folder.
- **Open** – opens the current default folder and displays its contents.

7.3 PORT SETTINGS

The **Port Settings** panel displays the default communications port settings that will be used when a new site is configured.



- **Port Settings** – the port settings that will be used as the defaults when a new site is configured:
 - **Baud rate** – select the transmission speed for the connection.

- **Data bits** – select the number of data bits per byte.
- **Parity** – select the type of parity bit checking used.
- **Stop bits** – select the number of stop bits used.
- **Flow control** – select whether or not hardware flow control is used.
- **Modem Initialization Strings** – if the system uses a modem and it requires one or more (up to a maximum of three) initialization strings, enter the initialization strings in this field. The strings may be separated with either a blank space or a semi-colon. **Note:** *modem initialization strings require **AT** at the beginning of each initialization string.*

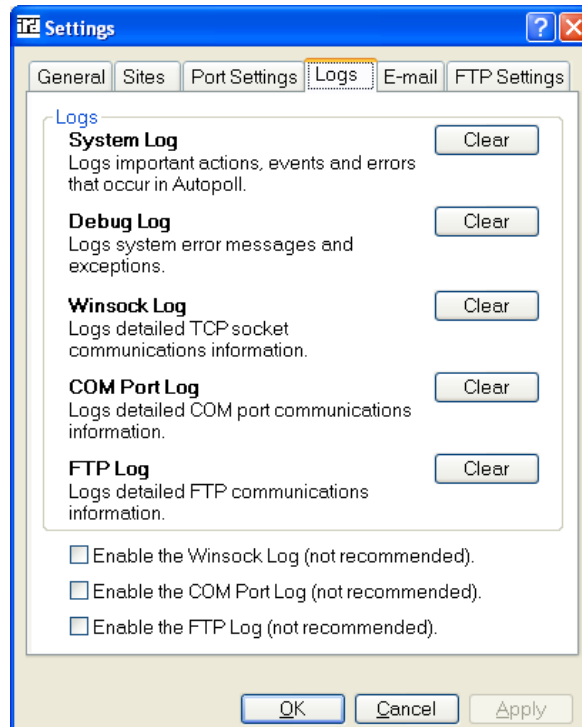
7.4 Logs

Log files can be found in the **Log** folder which is located in the common documents folder:

in Windows Vista and Windows 7 this is **C:\Users\Public\Documents\IRD\Autopoll**, and in Windows XP it is

C:\Documents and Settings\All Users\Shared Documents\IRD\Autopoll.

The **Logs** panel can be used to clear the event logs and enable optional logs.

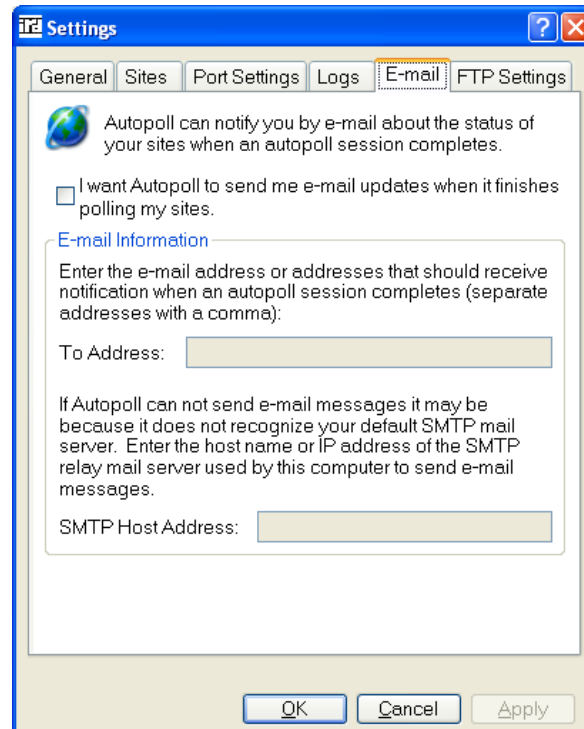


- **Clear** – the **Clear** button will delete the appropriate log when clicked.
- **Enable the Winsock Log** – this checkbox will enable the system to log Winsock events. It should only be enabled for troubleshooting sessions as the log will quickly accumulate a large number of entries.
- **Enable the COM Port Log** – this checkbox will enable the system to log COM Port events. It should only be enabled for troubleshooting sessions as the log will quickly accumulate a large number of entries.
- **Enable the FTP Log** – this checkbox will enable the system to log FTP events. It should only be enabled for troubleshooting sessions as the log will quickly accumulate a large number of entries.

WARNING: passwords are not encrypted when logged to the Winsock, Com Port or FTP log files, so enabling these options should only be done on a secure computer or when the logs are being monitored in real time and the files will be deleted at the end of the monitoring session.

7.5 E-MAIL

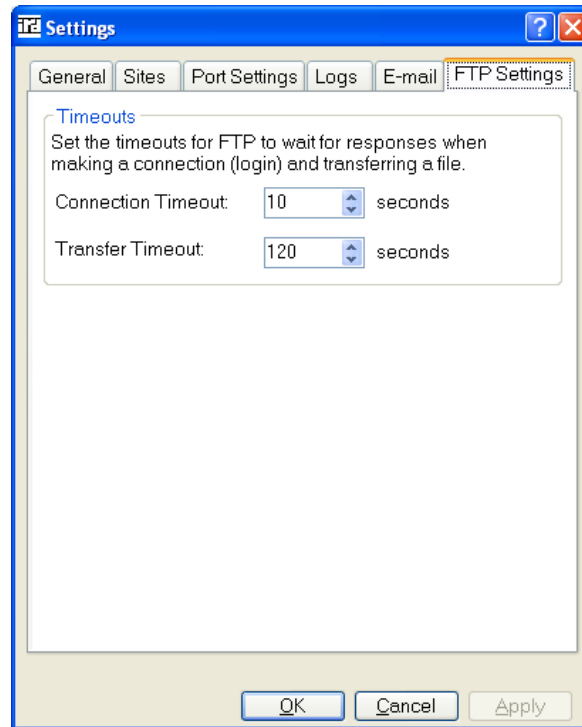
Autopoll can be configured to send a status notification message after it finishes an automatic scheduled polling session:



- **I want Autopoll to send me e-mail updates when it finishes polling my sites** – enable this checkbox to have a status e-mail sent when Autopoll finishes a scheduled polling session.
- **To Address** – enter the e-mail address to send the status message to. Multiple addresses can be entered by separating each address with a comma.
- **SMTP Host Address** – enter the name or IP address of the SMTP server used by this computer.

7.6 FTP PROPERTY

This panel sets FTP parameters used if this system has any remote hosts that use FTP to transfer files. It is recommended that the settings be left at the default values.



- **Connection Timeout** – the number of seconds to wait for responses when attempting to establish a connection.
- **Transfer Timeout** – the number of seconds to wait for responses when transferring a file.

A.0 APPENDIX A - LOGS

Autopoll maintains a text format log that details important actions, events and errors that occur in the system.

Configuration and log folders are stored in the common documents folder:

C:\Users\Public\Documents\IRD\Autopoll in Windows Vista and Windows 7, and

C:\Documents and Settings\All Users\Shared Documents\IRD\Autopoll in Windows XP.

A.1 SYSTEM LOG

The format and common log entries found in the system log will be similar to the following example, which displays a successful transfer of the ten files **20090816.001** through **20090825.001** from the site named **Top_main**:

[8/28/2009 8:20:30 AM] Information: Startup - Build Version: 3.0.3521

[8/28/2009 8:20:30 AM] Information: Startup - Autopoll started with the following arguments:
/P Top_main

[8/28/2009 8:20:40 AM] Information: Poll started on site Top_main [FTP Server, Network (FTP),
Daily, 8/16/2009 up to 8/27/2009]

[8/28/2009 8:20:46 AM] Information: Logging into FTP Server

[8/28/2009 8:20:46 AM] Information: Logged into FTP Server

[8/28/2009 8:20:52 AM] Information: Retrieving File: 20090816.001

[8/28/2009 8:22:03 AM] Information: Retrieving File: 20090817.001

[8/28/2009 8:23:12 AM] Information: Retrieving File: 20090818.001

[8/28/2009 8:24:54 AM] Information: Retrieving File: 20090819.001

[8/28/2009 8:26:28 AM] Information: Retrieving File: 20090820.001

[8/28/2009 8:28:04 AM] Information: Retrieving File: 20090821.001

[8/28/2009 8:29:54 AM] Information: Retrieving File: 20090822.001

[8/28/2009 8:31:39 AM] Information: Retrieving File: 20090823.001

[8/28/2009 8:32:46 AM] Information: Retrieving File: 20090824.001

[8/28/2009 8:33:51 AM] Information: Retrieving File: 20090825.001

[8/28/2009 8:38:30 AM] Information: Poll successfully completed on site Top_main